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# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

June 27, 2014

Jeff Sagers  
Castle Valley Stone LLC  
2421 West 350 North  
Hurricane, Utah 84737-2046

Subject: Second Review of Amended Notice of Intention to Commence Large Mining Operations, Castle Valley Stone LLC, Brown's Canyon Rock Quarry, M/043/0017, Salt Lake County, Utah

Dear Mr. Sagers:

The Division of Oil, Gas and Mining has completed a review of the referenced Notice of Intention to Commence Large Mining Operations which was received June 9, 2014. The attached comments will need to be addressed before tentative approval may be granted.

The comments are listed under the applicable Minerals Rule heading; please format your response in a similar fashion. Please address only those items requested in the attached technical review by sending replacement pages of the original mining notice using redline and strikeout text. After the notice is determined technically complete, the Division will ask that you submit two clean copies of the complete and corrected plan. Upon final approval, both copies will be stamped approved and one will be returned to you.

The review references sections of the plan. In many cases the plan includes the full rule citation, such as R647-4-105.1, but the review only references Section 105.1.

The Division has the following general comments:

The submittal should be formatted to easily incorporate additional revisions and amendments. The Division may have additional comments based on the review responses.

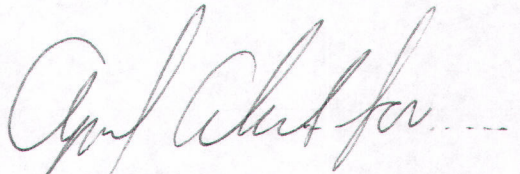
The Division may have additional comments based on the review comment responses and follow-up submittals.



Page 2 of 7  
Jeff Sagers  
M/043/0017  
June 27, 2014

Please submit your response to this review by July 31, 2014. The Division will suspend further review until your response to this letter is received. Please contact Leslie Heppler at 801-538-5257 if you have questions about the review or if you would like to meet and discuss the review. Thank you for your cooperation in completing this permitting action.

Sincerely,

A handwritten signature in cursive script, appearing to read "Paul B. Baker".

Paul B. Baker  
Minerals Program Manager

PBB: lah: eb  
Attachment: Review  
cc: Summit Co - S Lewis@summitcounty.org  
P:\GROUPS\MINERALS\WP\M043-Summit\M0430017-BrownsCynRock-RockProducts\Final\REV2-6100-06262014.doc



**SECOND REVIEW OF NOTICE OF INTENTION  
 TO COMMENCE LARGE MINING OPERATIONS  
 Castle Valley Stone, LLC.  
 Browns Canyon Rock Quarry 1  
 M/043/0017  
 June 26, 2014**

**General Comments:**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
1	General	Redline strike out copy does not include all comments. Please include an answer to each Redline-strikeout.	lah	

**105.1 - Topographic base map, boundaries, pre-act disturbance**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
2	Exhibit A	New exhibit A is great, but there is now no information land status. Please include a surface and mineral status map. Please provide missing map information.	lah	
3	Exhibit A	This exhibit has been changed from showing property boundaries to permit boundaries. The Division needs environmental baseline information for anything within the permit area and so suggests that the boundary designation be changed to what it was.	lah	
4	Page 3	Correct the location of operations to match the intent of the permit.	lah	
5	Page 4	Include the names of adjacent property owners.	lah	
6	Section 105.1 (b)	Typo – curstructured.	lah	
7	Section 105.2	Typo – “1:=500’; please correct.	lah	
8	Section 105.2	The text says, “...there may be a requirement to establish a borrow pit in an area with more soil.” As discussed and agreed upon, the original soil survey noted more than adequate soils on the site. Please rewrite.	lah	
9	Section 105.2	The text indicates dump locations are identified on exhibit D, but there are no dump locations noted on Exhibit D.	lah	
10	Section 105.2	The text indicates Exhibit D shows the number of acres to be affected by the operation and that it has a border outlining the mining area. Exhibit D is the surface facilities map and does not have a clear border. It also does not show all mining, storage and operating areas.	lah	
11	Section 105.2	Typo - As written “...1”-250’; please correct.	lah	
12	Section 105.2	The text refers to a cross hatched area, but nothing on Exhibit E is cross hatched. Please remove the words cross hatched.	lah	
13	Section 105.2	As written “...(when available)”. Please remove.	lah	



### 105.2 - Surface facilities map

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
14	Exhibit F & G	Change permit boundary to property boundary	lah	
15	Section 105.2	Please update the maps and edit numbers in the text to match the maps. The text says there are 25 acres.	lah	
16	Exhibit D	Add existing roads to the legend (maroon double line).	lah	

### 105.3 - Drawings or Cross Sections (slopes, roads, pads, etc.)

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
17	Section 105.2	Section 105.2 mentions several features which are not documented on Exhibit E. Please add the following to Exhibit E: roads (brown), topsoil (purple), waste dump (orange), slopes (yellow), and border.	lah	
18	Section 105.2 and Exhibit E	Please provide a cross section perpendicular to the current highwall which shows the 3H:1V final highwall and the current topography. Then rewrite text to describe what the final slope configuration will be.	lah	
19	Section 105.2 and Exhibit E	As written "...3 horizontal:1 vertical and 45 degree slopes." Please rewrite to provide consistent slope designation. The map and cross section both show the final slopes as "3H:1V," so the text should also be as "3H:1V."	lah	
20	Section 105.2, final paragraph	Please reword this section as it does not match Exhibit E. Wording in the second paragraph does not contain firm commitments. Please rewrite this paragraph removing "attempt" and "anticipated."	lah	

### 105.4 - Photographs

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
21	Omission	No photos have been included. The Division recommends including photos though this is not required. If no photos are included, please include a statement, such as "No photos have been submitted."	lah	

### R647-4-106 - Operation Plan

#### 106.2 - Type of operations conducted, mining method, onsite processing, deleterious materials

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
22	Section 106.2	The plan says no blasting is planned, yet the text after digging is written in a tense indicating blasting is ongoing. Please clarify.	lah	
23	Section 106.2	It appears "Digging" should be a separate heading (#2). Otherwise it is a stray word not connected with any sentence.	lah	



Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
24	Omission	As previously written, "The text needs to address how the landslide will be remediated." The plan needs to address the landslide prior to the 2014 annual report. Include a brief paragraph under the Operation Plan. The text on page 15, item 8, should be moved from operation practices to the operation plan.	lah	
25	Omission processing	As previously written "Address onsite processing (guillotine) and if any deleterious materials are used on site." Processing should be number 3 in Section 106.2, type of operations conducted.	lah	
26	Section 106.2 under concurrent reclamation	Please restore the comment that "concurrent reclamation is planned, but not yet active."	lah	

### 106.3 - Estimated acreages disturbed, reclaimed, annually

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
27	Section 106.2	The plan now contains a statement that topsoil stockpiles will be seeded periodically, but please either remove the vague statement "...prefer to leave unseeded" or add a statement about weed control.	lah	

### 106.5 - Existing soil types, location, amount

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
28	Section 106.5	<p>Please provide the volume of soil that has been, and will be stockpiled. This is not clear, and the volumes conflict. Section 106.5 indicates +/- 19,000 yds<sup>3</sup> of soil is available, but it doesn't break down how much has been salvaged and how much more will be salvaged. Section 106.6 indicates 22,500 yds<sup>3</sup> will be stockpiled.</p> <p>The plan has now been changed to state 6-12 inches of soil will be salvaged (under 106.5) and 6-10 inches (under 106.6). The total cubic yards appears to be calculated on the low end (6 inches), which makes one think there is no intent of salvaging more than a 6-inch depth. The original soils indicated a soil depth of 10-12 inches. While the plan has been changed from the 1-6 inches depth, it does not reflect the soil that was reported originally, nor does the plan provide an updated soils survey to demonstrate the original soil survey was in error. Please correct to show 10-12 inches of soil available for salvage/stockpiling and base the estimated salvage amount on the mid-point of 11 inches (yielding approx. 39,930 yds<sup>3</sup> of soil.</p> <p>Please change the note on Exhibit E accordingly.</p>	lk          lah	

### 106.6 - Plan for protecting & re-depositing soils

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
29	Section 106.6	See comment under R647-4-106.5 regarding soil depth. Revise the plan to show proper depth of soil to be salvaged and protected for reclamation.	lk	



### 106.7 - Existing vegetation - species and amount

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
30	Section 106.7	As previously written: "While the original permit area (6 acres) may have had only 30 % vegetation cover, much of the area where expansion has occurred has much more vegetation (the adjacent quarry in the same vegetation type reported 52% cover). Please provide an updated vegetation survey which correctly identifies the vegetation cover in the expansion area."  The Vegetation survey does not accurately depict the current vegetation type, nor were sufficient samples taken. Please provide an adequate vegetation survey of the area (and/or surrounding areas) to be disturbed.	lah & lk	

### 106.8 - Depth to groundwater, extent of overburden, geology

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
31	Omission	Please provide a geologic cross section.	lah	
32	Section 106.8, paragraph 2	Include verbiage in the text regarding the percentage of secondary containment of petroleum products or other deleterious material. It should be at least 110 percent.	lah	
33	Section 106.8, paragraph 2	This paragraph mentions "other deleterious materials." Please specify what other deleterious materials might be stored on site and provide MSD sheets.	lah	
34	Section 106.8, Paragraph 2	This information should be moved to Section 647-4-109 discussing impacts since petroleum and deleterious materials are impacts.	aa	
35	Section 106.8, Paragraph 3	Water right E4056 is located to the northwest of the project area, not to the northeast.	aa	

### R647-4-108 - Hole Plugging Requirements

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
36	Section 108	As previously written "Please rewrite. 'This operation does not intend to drill holes, but if any drill holes are proposed in the future the operator will amend the plan and follow the hole plugging requirements of R-647-108.'" The Division prefers the verbiage written in this text block versus the blue line verbiage written in NOI submitted on June 9, 2014.	lah	

### R647-4-109 - Impact Assessment

#### 109.1 - Impacts to surface & groundwater systems



Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
37	Omission	Additional information is required as to where groundwater occurs and a justification as to why there is no hydrologic connection with the site. The closest surface occurrences of water should also be documented here.	aa	
38	Omission	Surface water bodies in the vicinity of the project area need to be discussed here, their relative location to the mining disturbance and whether or not any operational activities will have an effect on the water bodies.	aa	
39	Omission	Groundwater findings from Section 106.8 should also be summarized in this section.	aa	

### 109.3 - Impacts on existing soils resources

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
40	Section 109.3	As previously written, "Disturbance to 26+ acres is a significant impact to soil resources – Please discuss soil impacts and the plans to mitigate. This would include salvaging all available soil resources for reclamation, protection of stockpiles, etc."  While the mitigation plans are generally discussed, the plan still states that the impacts to soils are minimal. This needs to be corrected. Also, provide more detail in the plans, or reference the pages that discuss the plans in detail.	lk	

### 109.5 – Mitigation to impacts

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
41	Section 109.5, Omission	In this section, please reference the preceding sections for actions to mitigate impacts.	lah	

### R647-4-112 - Variance

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
42	Section 112	No variances were requested, and no response is needed.	lah	

### R647-4-113 – Surety

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
43		Please include the cost to reclaim the site under the worst case scenario. By worst case the Division means maximum disturbance. The Division would need costs to reclaim highwalls (at least to a 45-degree slope) and to regrade slopes to 3H:1V.	whw	